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Cross-border migration and travel: A virtuous relationship

International migration boosts travel and vice versa, bringing economic benefits but challenging public policy

Keywords: cross-border mobility, visiting friends and relatives, business travel, networks, information and communications technology

ELEVATOR PITCH

The ongoing relationships between emigrants and their families, friends, and business contacts in their home countries can increase outbound and inbound cross-border travel, while cross-border tourism and business and study trips can trigger migration. New communication technologies, such as social media and video chat, only partially substitute for face-to-face meetings. In fact, the greater use of such technologies boosts demand for in-person meetings. Short- and long-term cross-border movements are becoming more complex, creating challenges for measuring immigration and for defining target populations for legislation and public policy.

KEY FINDINGS

Pros

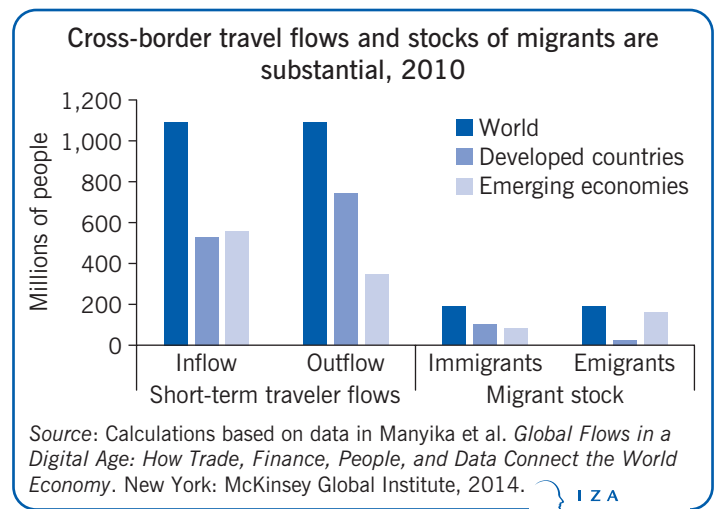
- + The ongoing relationships between emigrants and friends and relatives back home stimulate tourism in home and destination countries.
- + A country's diaspora strengthens international business networks, which leads to growing trade and diffusion of innovation.
- + Advances in information and communication technologies make it easier to maintain relationship capital across borders and lower the cost of migration.
- + Temporary migration and travel for study, tourism, or business are effective pathways to subsequent successful settlement.

Cons

- Growing global mobility and the increasing complexity of migration and travel flows reduce the usefulness of conventional statistics on flows and stocks of migrants and travelers.
- Laws, regulations, and institutions developed to manage permanent and long-term settlement are not adequate in an era of increasing mobility and transnationalism.
- For countries to share in the burden of providing social security to transnational populations will require new bilateral or multilateral arrangements and perhaps a greater role for cross-border portable private-sector insurance.

AUTHOR'S MAIN MESSAGE

As the volume and complexity of international migration rises, many public services (health, education, pensions) and taxation may no longer be compatible with mobility patterns, and some services may require more private provision. Greater mobility also demands reconsideration of policies and laws on immigrant settlement and integration. The presence of large numbers of temporary migrants calls for a fresh look at the meaning of citizenship and cultural identity and at policies to encourage immigrant integration. Increasingly, migrants may be recruited on a "trial" basis, with temporary work or study permits providing a subsequent path to permanent residence.



MOTIVATION

People are crossing borders more than ever before. Sometimes they travel to visit a foreign destination briefly for work, pleasure, or other reasons, and sometimes they take up residence, temporarily or permanently, in another country. International travel and migration have been growing fast in recent decades and are part of the global increase of flows of all kinds: goods, services, finance, information, and people. These flows are growing in response to intensified global economic integration, facilitated by trade liberalization, the declining real costs of international travel, and information and communication technologies that have vastly improved the means of communicating with people abroad and the accessibility of information about foreign destinations. However, geography still matters, and flows of all kinds satisfy the social sciences equivalent of Newton's gravity model of physics: in the case of international migration and short-term travel, flows are inversely correlated with the distance between home and destination countries and positively correlated with the scale of population and economic activity in both countries. Distance can refer to the cultural and institutional distance between home and destination countries as well as the geographic distance. Furthermore, higher income increases mobility of all forms.

This paper focuses on how international migration and travel reinforce each other and on the related policy challenges.

DISCUSSION OF PROS AND CONS

How much travel and cross-border migration are there?

It is hard to quantify the total volume of international travel at the global level. Figure 1 shows some estimates for the world as a whole and for developed countries and emerging market economies. For comparison, the other types of cross-border flows (goods, services, financial, migration, and data) and GDP and population are also included in the table. People made an estimated 1.1 billion short-term cross-border trips in 2010. It is safe to say, however, that air travel is the dominant mode for the cross-border movement of people. Data from the International Air Transport Association show a 6% annual growth in the number of international airline passengers in recent years, with the total number expected to reach 1.5 billion by 2016. A large proportion of these trips are to visit friends and relatives living in another country. Asked about the main purpose of their international travel, about 20–40% of travelers say that this is the main purpose.

The total number of people living abroad was about 194 million in 2010 (Figure 1). Based on the trend revealed in recent UN data, the number of people living abroad (the global stock of international migrants)—including an estimated one-third of the 60 million refugees, asylum seekers, and internally displaced persons—may be approaching 250 million in 2016, or about 3.5% of the world population. These migrants will trigger travel back to the home country (outbound visits to friends and relatives) and will also be visited by some of the relatives and friends they left behind (inbound visits from friends and relatives). Migrants may also continue to have work-related ties with people in their home country that may spark visits in both directions. Such interrelationships between migration and travel depend on the type of migration, whether labor and entrepreneurial migration, migration for study, transnational living for retirement, or other reasons [1].

The increasing complexity of international mobility patterns is blurring the boundaries between migration and travel. Education abroad, temporary migration, seasonal work,

Figure 1. Cross-border flows and migrant stocks in the world

Type of flow and stock	World	Developed countries	Emerging economies
<i>Goods</i>			
Inflow (billion US\$, 2012)	17,514	10,886	6,628
Outflow (billion US\$, 2012)	17,514	10,484	7,030
<i>Services</i>			
Inflow (billion US\$, 2012)	4,400	2,857	1,543
Outflow (billion US\$, 2012)	4,400	3,219	1,181
<i>Financial flows</i>			
Inflow (billion US\$, 2012)	4,016	2,612	1,404
Outflow (billion US\$, 2012)	4,016	2,479	1,537
<i>Short-term traveler flows</i>			
Inflow (million people, 2010)	1,093	534	559
Outflow (million people, 2010)	1,093	742	351
<i>Migrant stock</i>			
Immigrants (million people, 2010)	194	107	87
Emigrants (million people, 2010)	194	30	164
<i>Data flows</i>			
Internet traffic (gigabytes/second, 2013)	31,213	24,741	6,472

Source: Calculations based on data in Manyika, J., J. Bughin, S. Lund, O. Nottebohm, D. Poulter, S. Jauch, and S. Ramaswamy. *Global Flows in a Digital Age: How Trade, Finance, People, and Data Connect the World Economy*. New York: McKinsey Global Institute, 2014; Exhibits A8 and A9.

tourists on working holidays, transnational company transfers, foreign assignments, cross-border retirement, and commuting between multiple residences all generate a considerable volume of cross-border travel. These movements can also be seen as forms of international migration if the person traveling spends a substantial share of any 12-month period in a country other than the country of birth. In conventional travel statistics, international migration is defined as an outbound traveler intending to live abroad for 12 months or more or an inbound traveler intending to stay for 12 months or longer. Travel and migration statistics are derived from information obtained at borders or through population registration systems, censuses, and surveys.

The effect of migration on travel: The role of relationship capital

Immigrants maintain links with family and friends they leave behind and sometimes with people they know professionally, to do business with them or to share information and maintain networks. Such relationships are referred to as relationship capital, which may reflect trust, reciprocity, and other characteristics. As does any type of capital, relationship capital depreciates over time, in this case because of the physical separation of migrants from the people left behind. Communication through email, social networks, and video chats reduces the rate of depreciation, but virtual interactions are not a perfect substitute

Defining international migration and travel

Defining international migration is not straightforward. The UN defines an international migrant as a person who resides in a country other than their country of birth. However, some definitions include children born in a destination country with at least one parent born abroad among the migrant population (the “allochthonous” population).

The notion of “residing” is open to interpretation. A person may have the right to reside indefinitely in a foreign country (a right to permanent residency) but may not actually spend much time there. More commonly, residency is defined by actual behavior. For example, a foreign person who spends 183 days or more of any fiscal year in a country may be considered a resident for tax purposes.

Migration statistics are often based on statistics on intended behavior, which are collected through surveys at arrival and departure. In that case, an immigrant is defined as a person whose country of last permanent residence is not the country of arrival and who states an intention of staying for 12 months or more, irrespective of whether that turns out to be the actual duration of stay. With an intended stay of less than 12 months, a person arriving is considered an inbound visitor. Similarly, a resident who leaves and states an intention to stay away for 12 months or longer is an emigrant; one who intends to stay less than 12 months abroad is an outbound visitor.

A temporary migrant resides in a country for an intentionally limited time, which may vary from a few months (a seasonal migrant) to several years (a foreign housekeeper or a professional, for example). Temporary migration is often circular, with some migrants returning to the destination country several times. The World Trade Organization refers to temporary migration to provide services abroad as the movement of natural persons (also called “Mode 4 of services trade”), which can again vary from a stay of a few months to a few years.

Visitors are often characterized by the primary purpose of the trip: visits to friends and relatives, holiday/vacation, business, education, conferences and conventions, and other reasons. Measuring the importance of any of these types of trips is not straightforward, because many travelers have more than one purpose for a trip—for example, combining visiting friends and relatives with a sightseeing tour, establishing business contacts, or seeking medical treatment abroad.

for meeting face to face. Thus, the longer a migrant is abroad, the weaker the relationship (the lower the level of relationship capital).

While the microeconomic theory of the maintenance of relationship capital considered here is that of a migrant returning home after some time abroad to rebuild a relationship, the story is similar for friends, relatives, or business contacts visiting the migrant in the destination country. And although the focus here is exclusively on cross-border migration and travel, the theory of relationship capital can also be applied to migration within a country.

Economic theory can derive an optimal average (steady-state) level of relationship capital with the people back home, given a migrant’s circumstances. When circumstances change, the optimal level of relationship capital may change. When migrants are abroad, their relationship capital declines. When they visit their home country, it increases. Some migrants maintain the optimal level of relationship capital by frequent short trips back home. Others travel less frequently, but stay in their home country longer.

Relationship capital

“Relationship capital,” a term used in economics, sociology, and business studies, refers to the strength of the mutually beneficial relationships between individuals or groups of individuals. As in the case of other forms of capital, such capital can be created by investment—through building relationships. However, if such relationships are not maintained through regular interaction and reciprocity, relationship capital will depreciate. Like financial capital, relationship capital yields a return to the owners, in the form of trust, cooperation, and resource sharing. Communities benefit from the combined relationship capital that links community members, which is referred to as a community’s social capital.

Immediately after a migrant moves abroad, relationship capital depreciates rapidly, but the rate of depreciation slows once a migrant has been abroad longer. Similarly, when a migrant returns to their home country, relationship capital is initially replenished rapidly, but the rate of appreciation slows over time, consistent with the economic principle of diminishing marginal returns in production. There is evidence from psychology and medicine to support the nature of these relationships over time, indicating that the optimal frequency at which an emigrant visits their home country is inversely related to the distance between the two countries and to the cost of travel [2]. Not surprisingly, trip frequency in the case of visiting friends and relatives is positively related to the psychological costs of living apart. When emigrants make more trips, each trip becomes shorter but the aggregate time spent in their home country increases—and the more so the greater the cultural diversity between the home and destination countries. Empirical support for this theory of the maintenance of relationship capital comes from data on travel to visit friends and relatives by New Zealand and UK citizens who immigrated to Australia between August 1, 1999 and July 31, 2000 [3].

In the case of travel between an emigrant’s destination and home countries for business-related reasons, both creating and maintaining relationship capital have many economic benefits. Earlier long-term emigrants (the diaspora) can be an important resource for businesses seeking opportunities abroad. They can act as intermediaries to build trust with potential business partners. Diasporas are also an important source of information. While some information about conditions in a potential market, known as codified knowledge, can be easily mailed or transmitted electronically (brochures, reports, manuals, legal documents, and so on), other information is more complex and more difficult to express verbally. Referred to as “tacit knowledge,” this second kind of information can be effectively disseminated only through face-to-face interactions. The information gained through business travel enhances another form of capital, an organization’s knowledge capital. Business travel can boost productivity [4], in part by stimulating the diffusion of new technology [5]. The innovation effect of travel is not restricted to business travel. Some research suggests that any type of inbound travel can boost productivity, even after accounting for the influence of productivity and income on cross-border travel (reverse causality) [6].

Empirical evidence that migration leads to increased trade and tourism

Several studies have shown that migration boosts trade. Sufficient empirical evidence is available to conduct a meta-analysis of this relationship, which is a quantitative synthesis of the literature that yields a weighted average of past estimates, with more weight given to

more precise estimates. A meta-analysis of some 300 estimates of the impact of a change in the number of immigrants (or their share of the population) finds that a 1% increase in the number of immigrants leads to a 0.15% increase in the volume of international trade [7]. Arrivals of foreign visitors trigger local expenditures on accommodation, food, transportation, and other goods and services. These expenditures, funded by the visitors' foreign currency, are a form of international trade. How much visitors spend will depend on the nature of their visit and on their budget. Spending is likely to be lower for travelers who are visiting friends and relatives, because these visitors may stay and eat in their hosts' homes rather than stay in a hotel and dine out.

A comprehensive study of the impact of migration on the volume of travel by purpose of trip has yet to be conducted, but some empirical evidence is available for tourism. New Zealand research suggests that the effect of migration on tourism can be several times greater than the effect on merchandise trade [8]. Estimates of the impact of immigration on inbound tourism for Australia, New Zealand, and the UK suggest that a 1% increase in the number of immigrants increases the number of inbound tourists by between 0.1% and 0.6% [9].

However, the impact of the additional tourism triggered by immigration on the balance of payments may not be positive if the effect is much larger on outbound trips than on inbound trips. New Zealand research suggests that this is indeed the case. Another interesting feature of the New Zealand study is that the impact of the country's own population living abroad (its diaspora) on tourism showed that New Zealand's diaspora did boost travel to and from New Zealand [8]. However, the effect was weaker on inbound tourism than on outbound tourism. These results suggest that emigration and immigration may have both positive and negative effects on tourism, at least in the case of New Zealand. Migration boosts travel, but the effect on the difference between inbound and outbound visitors is negative: both immigrants and diasporas increase inbound travel less than they increase outbound travel. The effect on the international balance of payments is difficult to assess without data on expenditures of inbound and outbound tourists. If the magnitude of these expenditures is similar, immigration may have a negative impact on net revenue from international tourism. The meta-analysis mentioned above suggests that, if the evidence on merchandise trade can be extended to tourism, whether there is a negative impact might be country-specific: in about half the countries considered, the impact of immigration on the trade balance was positive [7].

The impact of cross-border travel on international migration

The intensification of global economic integration has led to an increase in international business travel. Business travelers establish networks that may facilitate migration. To establish a foothold on foreign soil, a business will need to develop a network of contacts in the foreign country. Face-to-face meetings are essential to establish a relationship built on trust and cooperation. Foreign direct investment (equity investment) has been shown to lead to migration to the country where the investment is made, particularly the migration of professionals who may take up leading roles in the foreign business venture. At the same time, businesses may tap into diasporas to establish foreign networks. The location of diasporas is an important determinant of the destination of foreign direct investment. Thus, migration, foreign direct investment, and business travel are closely interrelated [10].

Similarly, travel for study abroad may lead to migration. Many educational institutions in developed countries attract foreign students as an important source of income. In 2012, at least four million students studied abroad. Given the quest for global talent in the modern knowledge economy, these students are a desirable source for recruitment of highly skilled workers after graduation. Not only have they been trained in ways that are appropriate to the destination country, but they have also already assimilated to the society to some extent. Thus, several countries give university graduates from abroad temporary residence permits (usually for 12 months) to find a job. The rationale is that if they succeed in finding a job, they are likely to integrate well into the destination country. Some countries, such as New Zealand, consider this “trial migration” an effective path to residence [11].

Finally, travel to visit friends and relatives and general tourism may also lead to subsequent migration. The standard microeconomic model of migration emphasizes that labor migrants are willing to incur the monetary and other costs of migration in order to reap an anticipated net gain in earnings, taking into account the amenities and cost of living in the destination country. Calculating the net benefit of migration is facilitated by the availability of various types of information about the potential destination country. Much of this information is available through the internet or through a network of contacts, but actual on-site “fact finding” through a personal visit yields additional information and valuable insights. Moreover, people who decide to migrate after visiting friends or relatives in a foreign country (or after their friends or relatives visit them in their home country) can benefit in a number of ways (networking, emotional, and financial support) from having friends and relatives in the destination country. This is one of the reasons for the often empirically confirmed hypothesis of migrants following “well-trodden paths.”

Are modern communication technologies substitutes for migration-related travel?

The rapid improvement in the video and sound quality of online interaction, along with the declining cost, is making virtual meetings an effective substitute for travel, for which private and public costs (resulting from the ecological footprint of travel) remain much higher. Video conferencing has been growing rapidly. Additionally, there are increasing opportunities in education and in conferences to participate through online access from distant locations. For example, massive open online courses (MOOCs) are increasingly available as a substitute for conventional university classes. However, much of the research suggests that travel and communications technologies are complements, not substitutes [12].

Face-to-face meetings are necessary to build trust and cooperation and for the transmission of tacit knowledge, even though codified knowledge can be easily transmitted electronically. Meeting in person can also boost creativity. Of course, information and communication technologies continue to evolve, and virtual face-to-face interaction may eventually come close to in-person interaction (although virtual interaction will never be a substitute for pleasurable gatherings in which meals and drinks are shared). Even where electronic communication is preferred because of its cost advantage, online contact is often enhanced by an initial face-to-face meeting. Additionally, even with the reduced need for direct personal interaction, the number of active contacts any individual has in business and social networks (for example, through LinkedIn and Facebook) is much larger on average than it was before the internet era. Thus, the number of cross-border trips may still rise, particularly as the real cost of air travel continues to decline.

This discussion suggests that the positive association between migration and travel will not weaken, even though the technology to communicate virtually improves. There is as yet little direct evidence on this ongoing positive relationship, but a case study of visits between locally born and immigrant residents of Israel and their relatives abroad finds that an increasing frequency of maintaining communication at a distance is associated with increased travel frequency, meaning that communication technologies and migration-induced travel are complements [13]. However, that study also suggests that the choice of communication technology matters: when people communicate with their relatives abroad by phone or email, they tend to travel more to visit them, but when they use online social network apps, they tend to travel less. Overall, these results suggest that as the global number of migrants, and consequently of people's international networks, increases, the volume of migration-induced travel will continue to increase as well, even though the number of trips associated with a particular person-to-person link may decline as a result of advances in communication technologies.

LIMITATIONS AND GAPS

As the distinction between international travel and migration is becoming increasingly blurred, available statistics may no longer adequately reflect the current reality. In many countries, population statistics are based on the *de jure* definition—which counts people based on their usual residence—and underestimate the economic demand generated by non-residents who are nonetheless part of the *de facto* population (the population actually observed in a particular place). Discrepancies between *de jure* and *de facto* populations vary seasonally and spatially.

Economic research shows that growing international mobility, including temporary and permanent migration and short-term travel, has major economic benefits through the additional trade in services, the greater efficiency in the allocation of labor, the strengthening of networks with diasporas, and the transmission of information generally. However, the interrelationships between travel and migration in an era of growing cross-border flows remain under-researched. Understanding these interrelationships and the impact of continuing technological and institutional changes in the transportation and information and communication sectors offers much promise for future research.

SUMMARY AND POLICY ADVICE

Global economic integration and large demographic, economic, and institutional differences across countries suggest that the number of people living abroad will continue to increase. At the same time, technological change and aviation industry deregulation are contributing to declining real costs of long-distance travel and growing passenger movements. The ongoing relationships between immigrants and their family, friends, and business contacts back home can boost travel, while tourism, study abroad, and business trips may trigger subsequent migration. This self-reinforcing spiral of growing mobility may be slowed by technology advances that make virtual interaction an effective substitute for in-person interaction, with potentially large environmental benefits. However, research suggests that information and communication technologies often complement rather than substitute for migration-induced travel.

The growing complexity of international mobility presents challenges for a wide spectrum of policy domains, including the monitoring of international travel, with its required documentation and visas. Governments should, for example, consider reintroducing statistics on the de facto population, perhaps aided by the geo-referenced “big data” generated by mobile phones and other electronic devices.

Additionally, governments need to be aware of the implications of the increasing volume and complexity of international migration for public funding of health and education services, and for taxation. With negotiations on global trade liberalization (the Doha Round) stalled since 2008 and the increasing reliance on bilateral and regional multilateral agreements, it is likely that these issues will also be negotiated on a bilateral or regional basis. For example, countries can share in pension payments to individuals based on the share of a person’s working life spent in each country. It may also be the case, however, that existing public systems are no longer compatible with observed mobility patterns. Particularly for highly mobile professional workers (often referred to as “international talent”), it seems likely that private provision will increase, such as through global insurance schemes that cover health care, income protection, and retirement.

More generally, the growth in cross-border mobility demands changes in policies and laws related to immigrant settlement and integration, away from a focus on conventional worker migration. The internationalization of higher education, the growth in cross-border retirement, and the increasing prevalence of residences in more than one country also necessitate an assessment of what these changes mean for the public sector. For example, when populations are highly mobile, it can be difficult and ineffective to charge people for services based simply on residence (and such poll taxes have proved to be highly unpopular in any case). It becomes more appropriate under those conditions to fund public services through indirect (consumption) taxes or direct user charges.

Finally, the presence of a large number of temporary migrants and transnationals in many countries demands a fresh look at the meaning of and requirements for citizenship, the notion of cultural identity, and policies to encourage the integration of immigrants. Increasingly, migrants may be recruited on a “trial” basis, with successful employment facilitated by a temporary work or study permit and with a path to permanent residence offered subsequently.

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Competing interests

The IZA World of Labor project is committed to the *IZA Guiding Principles of Research Integrity*. The author declares to have observed these principles.

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REFERENCES

Further reading

Anderson, B., and S. Blinder. “Who counts as a migrant? Definitions and their consequences.” *Migration Observatory Briefing*. Oxford: University of Oxford Centre on Migration, Policy and Society, 2015.

Williams, A., and C. M. Hall. *Tourism and Migration*. Dordrecht, Netherlands: Kluwer Academic Publishers, 2002.

Key references

- [1] Williams, A., and C. M. Hall. “Tourism and migration: New relationships between production and consumption.” *Tourism Geographies* 2:1 (2000): 5–27.
- [2] Van Tilburg, M. A. L., A. J. J. M. Vingerhoets, and G. L. Van Heck. “Homesickness: A review of the literature.” *Psychological Medicine* 26:5 (1996): 899–912.
- [3] McCann, P., J. Poot, and L. Sanderson. “Migration, relationship capital and international travel: Theory and evidence.” *Journal of Economic Geography* 10:3 (2010): 361–387.
- [4] Dowrick, S., and M. Tani. “International business visits and the technology frontier.” *Economics Letters* 110:3 (2011): 209–212.
- [5] Hovhannisyan, N., and W. Keller. *International Business Travel: An Engine of Innovation?* NBER Working Paper No. 17100, 2011.
- [6] Andersen, T. B., and C. J. Dalgaard. “Flows of people, flows of ideas, and the inequality of nations.” *Journal of Economic Growth* 16:3 (2011): 335–356.
- [7] Genc, M., M. Gheasi, P. Nijkamp, and J. Poot. “The impact of immigration on international trade: A meta-analysis.” In: Nijkamp, P., J. Poot, and M. Sahin (eds). *Migration Impact Assessment: New Horizons*. Cheltenham, UK: Edward Elgar, 2012; pp. 301–337.
- [8] Law, D., M. Genc, and J. Bryant. “Trade, diaspora and migration to New Zealand.” *The World Economy* 36:5 (2013): 582–606.
- [9] Gheasi, M., P. Nijkamp, and P. Rietveld. “Migration and tourist flows.” In: Matias, A., and P. Nijkamp (eds). *Tourism Economics: Impact Analysis*. Heidelberg, Germany: Physika-Verlag, 2011; pp. 111–126.
- [10] Gheasi, M., P. Nijkamp, and P. Rietveld. “Migration and foreign direct investment: Education matters.” *Annals of Regional Science* 51:1 (2013): 73–87.
- [11] Bedford, R., E. Ho, and C. Bedford. “Pathways to residence in New Zealand, 2003–2010.” In: Trlin, A., P. Spoonley, and R. Bedford (eds). *New Zealand and International Migration: A Digest and Bibliography*. Palmerston North and Hamilton, New Zealand: Massey University and University of Waikato, 2010; pp. 1–49.
- [12] Mokhtarian, P. L. “If telecommunication is such a good substitute for travel, why does congestion continue to get worse?” *Transportation Letters* 1:1 (2009): 1–17.
- [13] Tchetchik, A. “Do communication technologies and ‘migration induced travel’ complement or compete with each other?” *Letters in Spatial and Resource Sciences* 8:1 (2015): 1–22.

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